

Work Order ID 85995

June-19-12 12:01:50 PM

85995

Page 1

Item ID: D3183-043

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Bracket Assembly

Start Date: 19/06/2012 Start Qty: 6.00

6

Cust Item ID:

Required Date: 03/07/2012 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/06/12

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3183	Rev C1								
100		0.00							
100	BAND SAW								
Bandsaw	Memo	0.00							
Jeaspa Bandsaw	Cut blanks: (1.500" x 2.250") 5.500" long								
110		0.00							
110	HAAS CNC VERTICAL MACHINING #1								
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	1-Machine D3183-3 as per Folio FA322 and Dwg D3183Identify as D3183-32-Deburr3-Scribe batch number								
120		0.00							
120	QC2- Inspect parts off machine FAI/FAIB								
QC	Memo	0.00							
Quality Control									

RT 12-08-09 (X6)

PO 12/08/12

6 0

PO 12/08/12

6 0

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 85995

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Page 2

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6

Cust Item ID:

Required Date: 03/07/2012 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____
QC: _____ Date: _____

Tooling: _____ Date: _____
SPC (Y/N): _____ Date: _____

Run Start ***NR1***
Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC8- Inspect parts - second check	0.00							
130									
QC	Memo	0.00							
Quality Control									
140	Small Fab	0.00							
140									
Small Fab	Memo	0.00							
Small Fab	Assemble D3183-043 as per Dwg D3183.								
150	QC5- Inspect part completeness to step on W/O	0.00							
150									
QC	Memo	0.00							
Quality Control									

29 12-8-16

6 f

6x

12/08/22

DAS 16 12/08/22

86

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Page 3

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Required Date: 03/07/2012 Req'd Qty: 6.00

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

Identify as per dwg & Stock Location **235B**

0.00

160

Packaging

Memo

0.00

Packaging

170

QC21- Final Inspection - Work Order Release

0.00

170

QC

Memo

0.00

Quality Control

MLJ 12/08/23**MF 12/08/23**

W/O: _____		WORK ORDER CHANGES					
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Picklist Print

June-19-12 12:01:55 PM

Page 1

Work Order ID: 85995

85995

Parent Item: D3183-043

D3183-043

Parent Item Name: Bracket Assembly

Start Date: 19/06/2012

Required Date: 03/07/2012

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:Pick:A04.02.18New issueKJ/DS
IPP Rev:B Changed Mat Size 08-06-26 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3183-045		Manufactured	No			100	Each	26.0000	2	12			
-----------	--	--------------	----	--	--	-----	------	---------	---	----	--	--	--

D3183-045

Bearing Assembly

**

Location

Loc Qty

Loc Code

ST286

26

B88989 (12K)

77830

1

79697

4

80903

21

D3121-21

Manufactured No

D3121-21

Bolt

**

Location

Loc Qty

Loc Code

ST235

95

66969

1

79732

4

83364

11

85332

19

85660

60

M174B1.500X02.250

Purchased

No

M174B1 500X02 250

17-4 SS Bar 1.50 X2.250

140

f

22.8479

0.4583

2.894526

**

122576

x 2.894526

4T 12 06 09

Location

Loc Qty

Loc Code

MAT031

22.8479

108309

1.08

113568

11.8333

115806

3.0846

124026

6.85

Dart Aerospace Ltd

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DART AEROSPACE LTD		Work Order:	85995
Description: Bracket		Part Number:	D3183-3
Inspection Dwg: D3183	Rev: C1	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
R0.190	+/-0.030	R0.190	✓		R.G.	
R0.063	+/-0.010	0.063	✓		R.G.	
0.182	+/-0.010	0.179	✓		VERN	PHD-01
0.070	+/-0.010	0.070	✓		"	"
0.100	+/-0.010	0.104	✓		"	"
Ø0.201 x 0.100	+/-0.010	0.203 x 0.099	✓		"	"
0.182	+/-0.010	0.180	✓		"	"
5.32	+/-0.030	5.323	✓		"	"
5.036	+/-0.010	5.033	✓		H.G.	
2.120	+/-0.010	2.116	✓		VERN	PHD-01
1.290	+/-0.010	1.286	✓		"	"
0.365	+/-0.010	0.365	✓		"	"
0.218	+/-0.010	0.217	✓		"	"
1.030	+/-0.010	1.030	✓		"	"
1.90	+/-0.030	1.890	✓		"	"
1.012	+/-0.010	1.009	✓		"	"
Ø0.201 x 0.100	+/-0.010	0.201 x 0.099	✓		"	"
0.786	+/-0.010	0.789	✓		"	"
Ø0.392	+0.002/-0.000	0.392	✓		MIC	PHD-02
R0.19	+/-0.030	0.190	✓		R.G.	
3.954	+/-0.010	3.955	✓		H.G.	
0.162	+/-0.010	0.162	✓		VERN	PHD-01
R0.19	+/-0.030	0.190	✓		R.G.	
R0.25	+/-0.030	0.250	✓		R.G.	
4.26	+/-0.030	4.263	✓		H.G.	
2.080	+/-0.030	2.080	✓		VERN	PHD-01
1.155	+/-0.010	1.155	✓		"	"
0.162	+/-0.010	0.164	✓		"	"
0.36	+/-0.030	0.360	✓		VERN	PHD-01
0.615	+/-0.010	0.605	✓		"	"
0.435	+/-0.010	0.429	✓		"	"
0.200	+/-0.010	0.201	✓		"	"
0.381	+/-0.010	0.371	✓		"	"
0.032	+/-0.010	0.028	✓		MIC	PHD-09

Measured by: PO	Audited by: RP	Prototype Approval:	N/A
Date: 12/08/12	Date: 2.8.12	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	03.11.12	New Issue P/O D3183-043	KJ/RF	
B	04.03.15	Changes as per revision C	KJ/JLM/RF	
C	06.03.09	Dwg Rev update	KJ/JLM	
D	08.01.28	0.182 dimension removed	KJEC/DD	

Dart Aerospace Ltd

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
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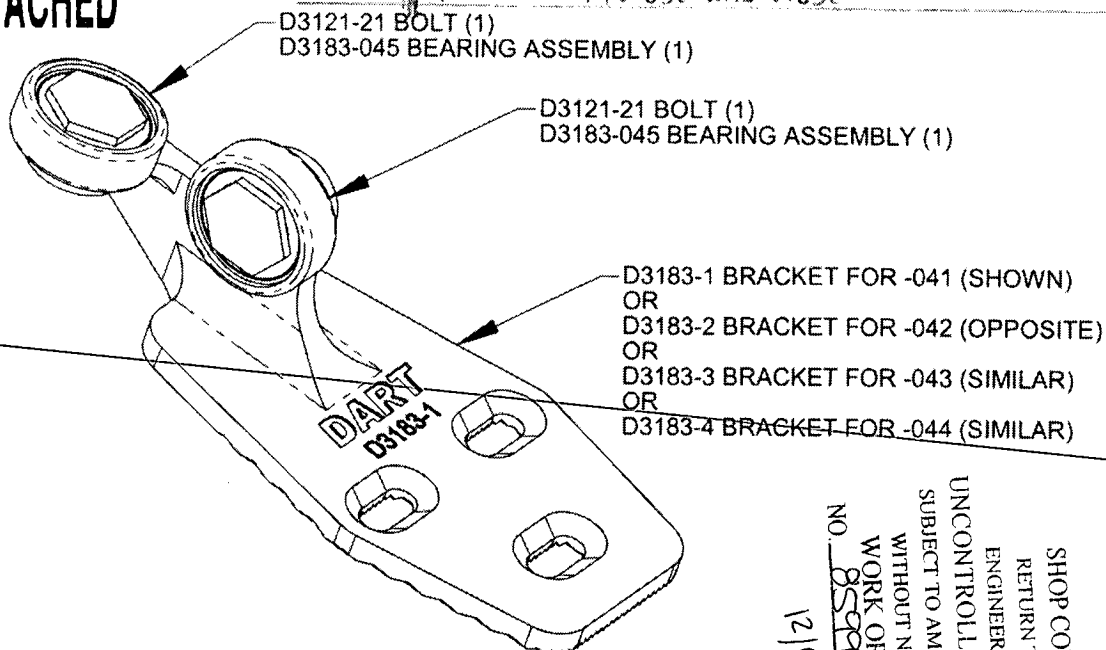
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NOTE: Date & initial all entries



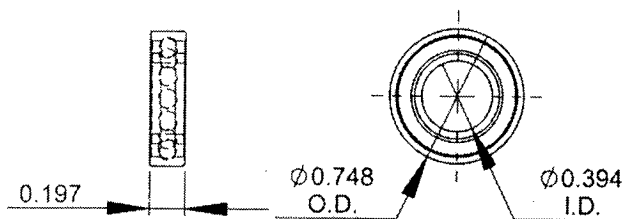
DESIGN #	DRAWN BY UP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3183	REV. C SHEET 1 OF 4
DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:1
A	03.01.24	NEW ISSUE	
B	03.06.17	REMOVE BEARING; 1.012 WS 0.882	
C	04.02.17	ADD -045/-9; 0.182 WAS 0.431	
CI	04.11.09	0.830 WAS 0.850	

RELEASED
04 03 01
DEO ATTACHED



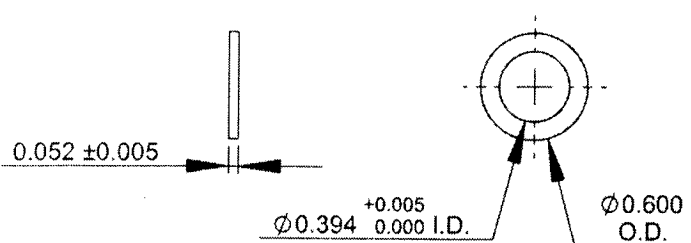
D3183-041 BRACKET ASSEMBLY (SHOWN)
D3183-042 BRACKET ASSEMBLY (OPPOSITE)
D3183-043 BRACKET ASSEMBLY (SIMILAR)
D3183-044 BRACKET ASSEMBLY (SIMILAR)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 85995 M.L.5
12/06/19



D3183-5 BEARING:
SPECIFICATION CONTROL DRAWING

- 1) SINGLE ROW, DEEP GROOVE, CONRAD TYPE, SHIELDED
- 2) POSSIBLE SUPPLIER: NSK P/N 6800ZZ
- 3) ALL DIMENSIONS ARE IN INCHES



D3183-7 WASHER

- 1) MATERIAL: AISI 303 ROUND BAR (M303R) ANNEALED
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

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Dart Aerospace Ltd

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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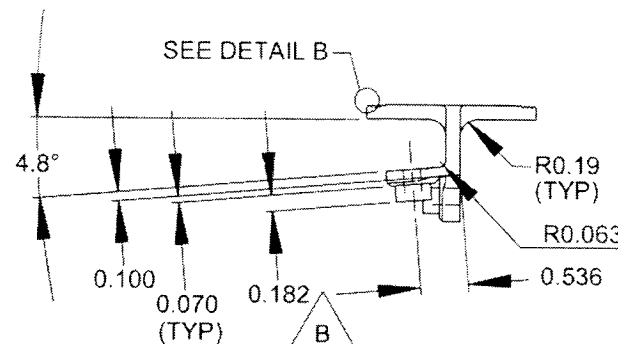
NOTE: Date & initial all entries

05995

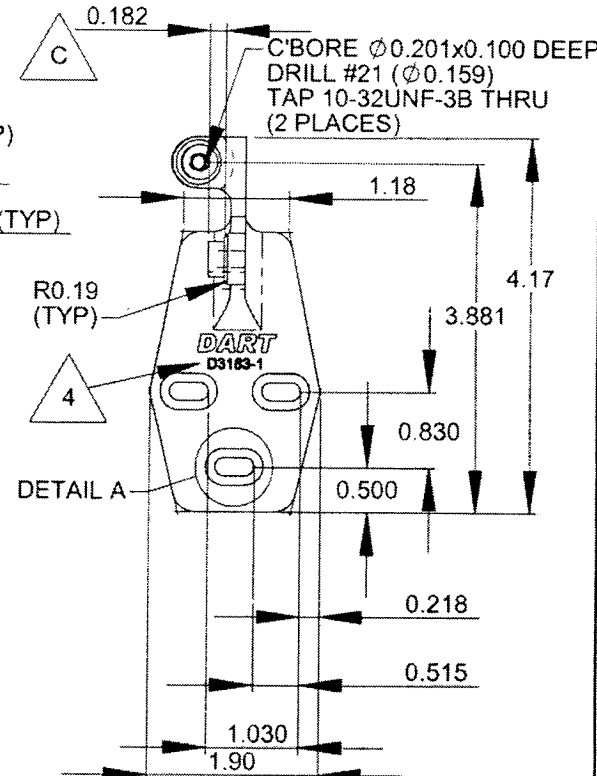
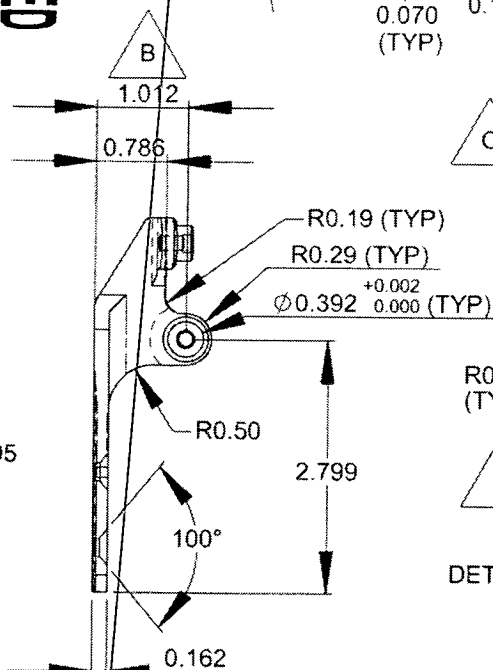
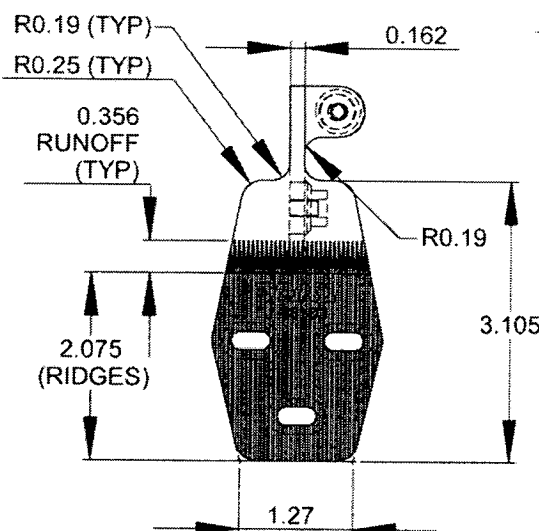


DESIGN	DRAWN BY	DART AEROSPACE LTD
CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA
DATE	DRAWING NO.	REV. C
04.02.17	D3183	SHEET 2 OF 4
TITLE	BRACKET ASSEMBLY	SCALE
		1:2

RELEASED
04.03.01



DEO ATTACHED



D3183-1 BRACKET SHOWN
D3183-2 BRACKET OPPOSITE

- 1) D3183-1 CAN BE MADE FROM D3183-3
D3183-2 CAN BE MADE FROM D3183-4
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 4) ENGRAVE DART P/N & LOGO AS SHOWN
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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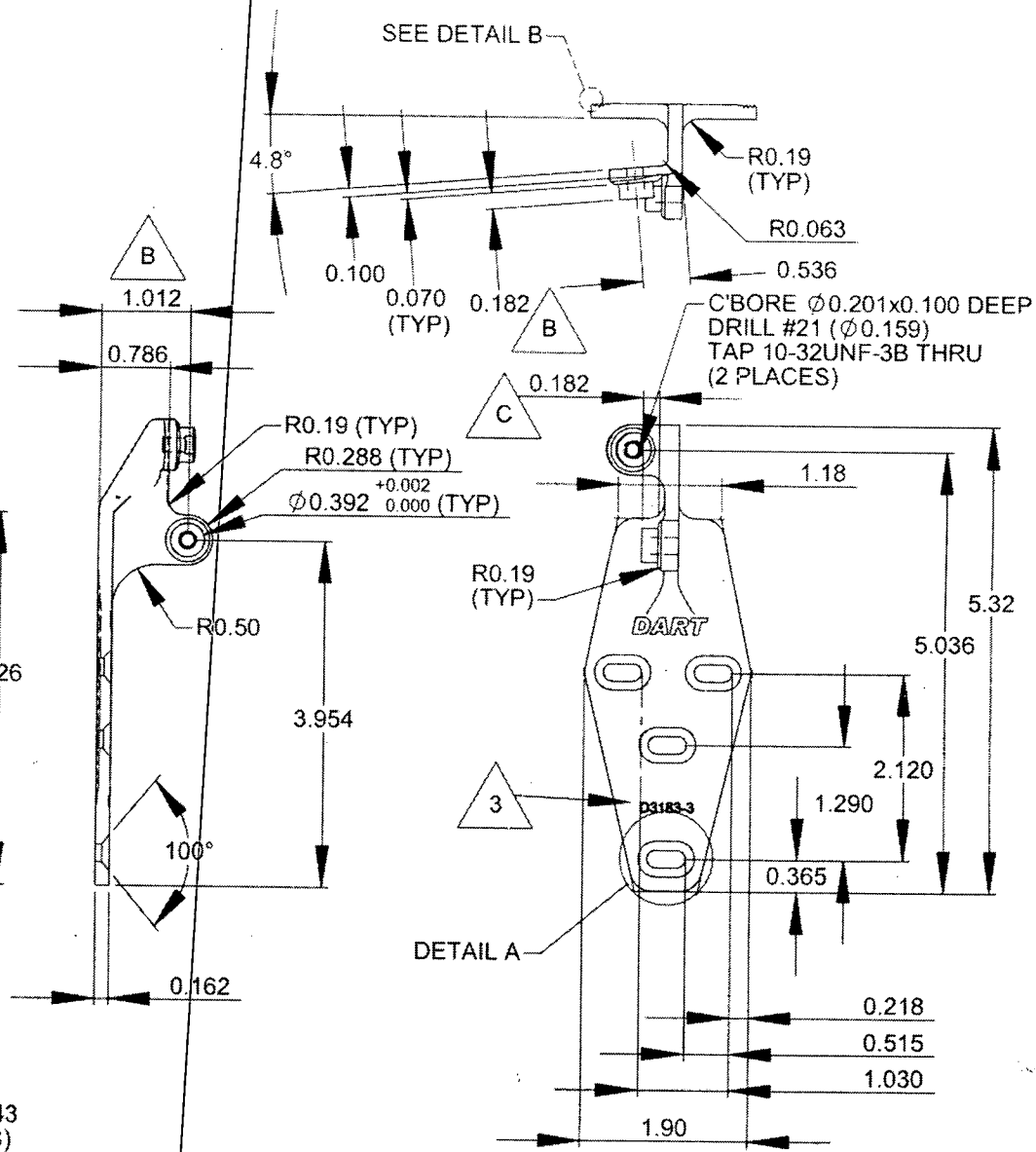
NOTE: Date & initial all entries

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DART



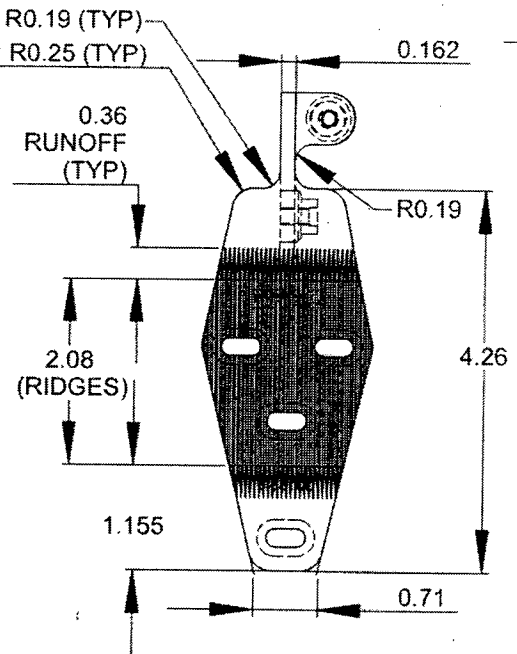
DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. C
DATE		D3183	SHEET 3 OF 4
04.02.17		TITLE	SCALE
		BRACKET ASSEMBLY	1:2



DEO ATTACHED

RELEASED

2013 01 14



D3183-3 BRACKET SHOWN
(REPLACES BELL P/N 412-030-304-105)
D3183-4 BRACKET OPPOSITE
(REPLACES BELL P/N 412-030-304-106)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) ENGRAVE DART P/N & LOGO AS SHOWN
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

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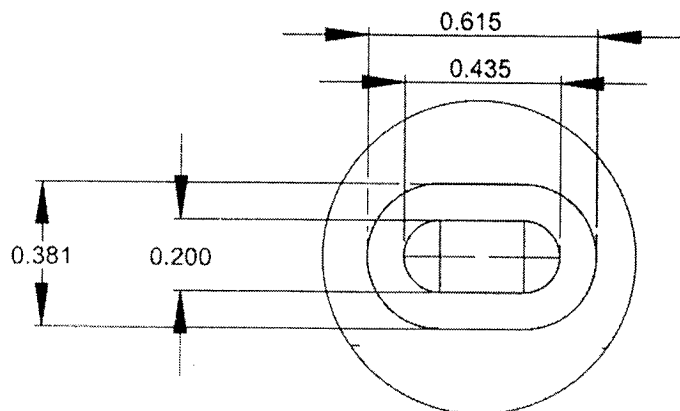
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DESIGN #	DRAWN BY #	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3183	REV. C SHEET 4 OF 4
DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:1

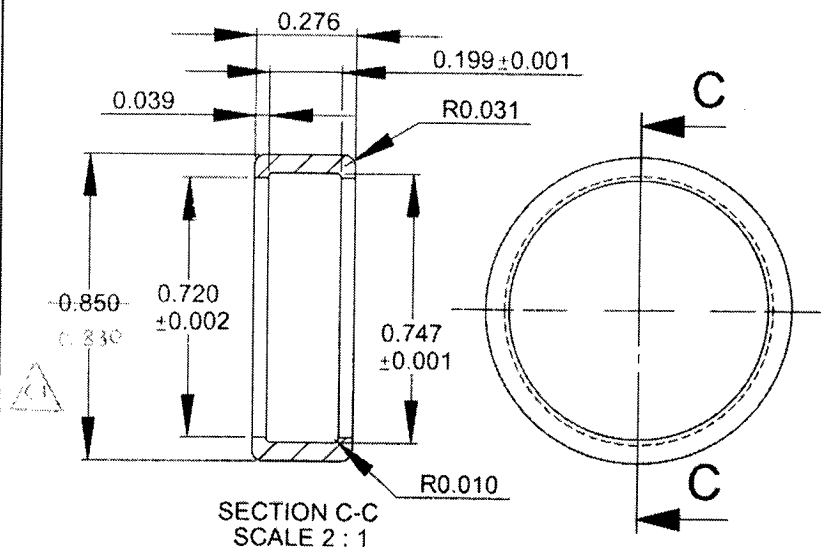
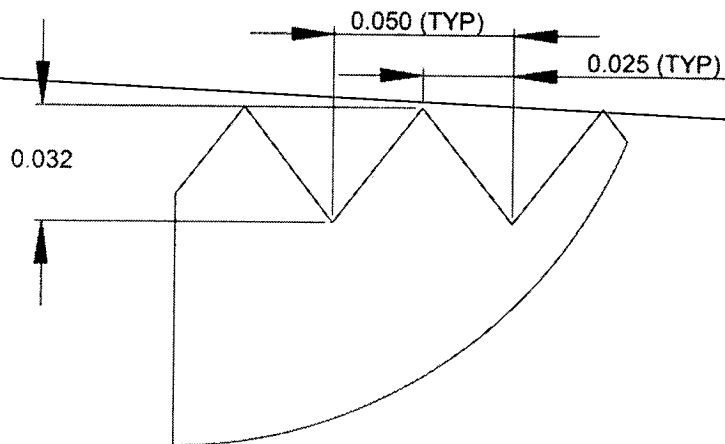


DETAIL A (2 : 1)

RELEASED
04.03.01

DEO ATTACHED

DETAIL B (20 : 1)



SECTION C-C
SCALE 2 : 1

D3183-9 CAP

- 1) MATERIAL: DELRIN ROD, Ø1.00
(REF DART SPEC. M-DELRIN-R1.00)
- 2) TOLERANCES ARE PER DART QSI 018
UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

D3183-045 BEARING ASSEMBLY

- 1) ASSEMBLE D3183-5 BEARING AND
D3183-9 CAP

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DRAWING NO. D3183	TITLE BRACKET ASSEMBLY	REV.C1	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3183-C1-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>qp</i>	CHECKED <i>js</i>	MFG. APPR. <i>DA</i>	APPROVED <i>MP</i>		DE APPR. <i>MP</i>		
DATE 10.05.14	DATE 10.06.30	DATE 10.06.30	DATE 10/06/30		DATE 10/06/30		

D3183-5 BEARING

ADD POSSIBLE SUPPLIER: KML P/N 6800-ZZ

BASIC LOAD RATING REQUIREMENT: Cr = 1720 N (386 lb) MIN [DYNAMIC]
Cor = 840 N (188 lb) MIN [STATIC]

REF PAR 10-012

05995

RELEASED
2010-07-22
MP

W/O:		WORK ORDER CHANGES					
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